







HEALTH CARE AND HUMAN SERVICES POLICY. RESEARCH. AND CONSULTING - **WITH REAL-WORLD PERSPECTIVE**.

Compensation: Retention, Performance and Force Management

#Reenlistment bonuses treat people like they were machines"

Dr. Walter Oi

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Economics of Retention and Compensation: Perspective

- Economic paradigm of occupational choice:
 - Extensive margin
 - Retention: Rational member or potential recruit chooses a career path to maximize utility, which is a function of both pecuniary and nonpecuniary factors
 - Intensive margin
 - Performance/productivity: member chooses to exert effort on the job and to invest in skills, assignments etc., to maximize utility.
 - Value of non-pecuniary aspects can be revealed through member's voluntary choices within the organization (intensive margin) or, ultimately, through retention decisions (extensive margin)
- Much of the research has focused on the relationship between compensation and retention



Background

- The link between military compensation and the retention of military members has, arguably, been the most studied area of military personnel economics
- General military pay raises and Selective Reenlistment Bonuses has been the focus
 of much of the research
 - These components of total compensation have probably had the greatest effect on overall military retention
 - Examples include:
 - Enns (1977) on reenlistment bonuses
 - Goldberg and Warner (1982)
 - Hosek and Peterson (1985)
 - Hogan, Mackin (2006)
 - Many more
- Other retention bonuses have also been studied
 - Navy and Air Force aviation bonuses
 - Navy Nuclear Power officer bonuses
- Efforts to provide estimates of the effect of the military retirement system, and changes in that system, on retention have resulted in significant method contributions
 - Annualized Cost of Leaving Model (Nelson, Enns, and Warner, (1984)
 - Dynamic Retention Model (Gotz and McCall, 1984)
 - Estimating Dynamic Models (Daula and Moffit, 1995)



Background

- The data required to analyze the relationship between retention and compensation is relatively straightforward and available
 - A measure of compensation
 - Basic pay, allowances
 - Bonuses, special pays
 - A measure of the retention decision outcome
 - Stay or leave or extend



Broader Framework

- Clearly important to understand the relationship between compensation, in its various forms, and retention.
- However, compensation incentives should be considered in a broader framework than simply retention, as important as that is. This broader framework includes incentives for:
 - Performance
 - Skill and capability acquisition, maintenance and proficiency
 - Force management incentives
 - Assignment incentives
 - Compensating differentials for onerous or hazardous assignments



Broader Framework

- In the context of this broader framework, compensation should be structured not only to maintain or increase retention, but to help improve the force in these other ways, whenever possible.
- Research, however, lags behind in understanding and helping to establish the relationship between compensation and many of these other goals:
 - Performance
 - Skill acquisition and proficiency
 - Force management
 - Assignment and compensating differentials
- Though there are compensation incentives offered for performance, proficiency, assignment, onerous conditions, and others-
 - Unlike the relationship between compensation and retention, there is relatively little evidence regarding how well these incentives work
 - One reason for this is that the measure of performance, proficiency, etc. are not as readily available as retention measures



Performance and Productivity Measures

- Pay that is structured to reward performance should, in principle, result in inducing additional effect and higher performance levels
 - However, to test this by estimating a relationship between pay and performance, one must have an observable measure of performance
- Promotion and speed of promotion is one possibility.
 - Promotion, however, has aspects of a rank order tournament
 - May be difficult to infer that effort and actual performance/productivity has increased directly
 - However, may be able to show that productivity measures increased on average as a result of greater reward for promotion
- Direct, observable measures of performance or productivity may be available in some occupations
 - Recruiters
 - Medical and legal professions
 - Maintenance and repair



Research Examples

- Studies have estimated factors affecting productivity of recruiters
 - Hogan and Simonson (2002), for example, estimate effects of ASVAB scores, experience, and other factors on recruiter productivity
- However, Special Duty Assignment Pay (SDAP) which is offered to recruiters, has not been structured to reward productivity, but simply to provide compensation for being a recruiter
- Compensation could be constructed to provide greater incentives for performance/productivity



Skill Acquisition and Proficiency

- Under the current structure, some compensation elements do provide incentives to acquire skills, maintain them and increase proficiency
- Examples include:
 - Many largely retention focused elements of compensation require obtaining and maintaining skill qualifications
 - Aviation Career Incentive Pay/ACCP; NOIP
 - Others
 - Largely retention incentives. Maintenance of qualifications is required, but incentives are not provided for greater proficiency
 - Health professions pays
 - Some compensation is conditional on obtaining/maintaining board certification
 - Foreign Language Proficiency Pay (FLPP)



Skill Acquisition and Proficiency

- With a few exceptions, there is little empirical research examining the relationship between compensation and skill acquisition/proficiency
 - While levels of proficiency may generally be difficult to measure, acquisition and basic maintenance of the skill is less difficult
- Research examples: FLPP
 - Hogan, Mackin et al (2007)
 - Provide empirical evidence that FLPP increases the number of members who attain proficiency in a critical foreign language and increases the numbers who score higher levels of proficiency



Force Management and Compensation Incentives

- Compensation can provide incentives:
 - To accept onerous duty assignments
 - To compensate for arduous or dangerous conditions
 - To increase service commits
 - Others
- **Examples include**
 - **Assignment Incentive Pay**
 - Sea Pay
 - Deployment and Combat-related pays
 - Greater retention bonuses for greater service obligations



Force Management and Compensation Incentives

- With some exceptions, there has been relatively little research devoted to understanding the relationship between force management and compensation and its potential for improving force management efficiently
- Examples of research that set the stage:
 - Warner and Goldberg (1984) Non-pecuniary factors
 - Hosek (2003): Deployment and retention
 - Debbie Clay-Mendez (1981) Sea Shore Rotation
 - Warner and Simon (2009) Enlistment bonuses and contract length
- However, in the literature that is there, there is little that actually related compensation to, for example, assignments fill rate and fit rates, etc.



Impediments to Research on the Non-Retention Behavioral Linkages

- Data is probably the most important limitation to research
 - Measures of performance, proficiency, etc. are not routinely available
 - More ad hoc data preparation, compared to retention
- Actual instances where compensation is linked, or potentially linked, to behavior in addition to retention are relatively scarce
 - Assignment
 - Credentials
 - Language proficiency
 - Contract length



Summary and Conclusions

- The relationship between compensation and retention has been much studied
 - Much is known about the effects of compensation on retention
 - As always, there is certainly more to do
- Relatively more emphasis should be placed on other behavioral responses to compensation
 - Estimate and evaluate effects, when compensation does address additional performance, proficiency or force management issues
- In the longer run, a broader empirical and theoretical research base for compensation, focusing on performance, proficiency, and force management issues in addition to retention, should provide a broader foundation
- This foundation may, in turn, result in more innovative ways that compensation can be used to improve performance, force management and readiness



The Lewin Group

3130 Fairview Park Drive Suite 800 Falls Church, VA 22042

Main: (703) 269-5500

www.lewin.com

The Lewin Group | Health care and human services policy research and consulting | www.lewin.com

3130 Fairview Park Drive, Suite 800 • Falls Church, VA • 22042 From North America, call toll free: 1-877-227-5042 • inquiry@lewin.com

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